

Appl. No. 10/708,401
Amtd. dated March 21, 2005
Reply to Office action of December 28, 2004

Amendments to the Claims

Claim 1 (currently amended) A method for detecting an unbalanced disc with a compact disc (CD) drive, the CD drive comprising a pick-up head for reading data stored on an optical disc, and a motor for rotating the optical disc, the method comprising the following steps:

- (a) adjusting a rotary speed of the motor so that a vibration frequency of the CD drive is approximates approximately equal to a resonance frequency of a coil of the pick-up head;
- 10 (b) when the vibration frequency of the CD drive is approximates approximately equal to the resonance frequency of the coil of the pick-up head, detecting if a voltage value of a central error (CE) signal is larger than a threshold voltage; and
- (c) determining if the optical disc is an unbalanced disc according to 15 a result of step (b).

Claim 2 (original) The method of claim 1 wherein the method further comprises converting an optical signal, which is reflected from the optical disc and received by the pick-up head, into the voltage value.

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Claim 3 (original) The method of claim 2 wherein the CE signal is generated according to the optical signal that is reflected from the optical disc and received by the pick-up head.

25 Claim 4 (original) The method of claim 1 wherein when the voltage value of the CE signal is larger than the threshold voltage, the optical disc is determined as an unbalanced disc.

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Claim 5 (cancelled)